

The opinion in support of the decision being entered today was **not** written for publication and is **not** precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HEINZ BORNSCHLEGL, and WINFRIED KOHLER

Appeal No. 1999-2197
Application No. 08/594,709

HEARD: DECEMBER 6, 2000

Before CALVERT, ABRAMS and BAHR, Administrative Patent Judges.
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-14. Claim 15, the only other claim pending in this application, stands withdrawn from further consideration under 37 CFR § 1.142(b) as being directed to a non-elected invention.

BACKGROUND

The appellants' invention relates to a process for forming a plate-shaped component made of an elastically and plastically formable material. Claim 1 is illustrative of the invention and reads as follows.

1. Process for forming a plate-shaped component made of an elastically and plastically formable material which can be hardened by artificial aging, said process comprising the steps of:

impact-body-forming the component into a double-curved shape;

thereafter artificially aging the component; and

during said artificial aging, subjecting the component to externally applied pressure of a value to exceed the creep resistance of the material.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Burg et al. (Burg)	5,144,825	Sep. 8, 1992
Soviet patent document	SU 513091	Dec. 20, 1974 ¹

Appellants' admitted prior art (the AAPA) on pages 1 and 2 of the specification

¹ We derive our understanding of this document from the English language abstract supplied by the examiner (Paper No. 5), which is of record in the application file.

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The following rejections are before us for review.

Claims 1-3, 6-10, 13 and 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over the AAPA in view of the Soviet patent document.

Claims 4, 5, 11 and 12 stand rejected under 35 U.S.C. § 103 as being unpatentable over the AAPA in view of the Soviet patent document, as applied to claims 1-3 and 8-10 above, and further in view of Burg.

Reference is made to the brief (Paper No. 14) and the answer (Paper No. 15) for the respective positions of the appellants and the examiner with regard to the merits of these rejections.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. For the reasons which follow, we cannot sustain the examiner's rejections.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of

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obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. See In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

The AAPA discloses two distinct processes for forming a plate-shaped component. The first, discussed on page 1, comprises clamping and external pressure application simultaneously with thermal hardening. The second process, discussed on page 2, comprises shot peen forming an already

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hardened blank into a double curved contour. Neither process comprises a step of impact-body-forming followed by a step of artificial aging, wherein, during the artificial aging, the component is subjected to externally applied pressure of a value to exceed the creep resistance of the material, as recited in each of independent claims 1 and 8 on appeal.

The Soviet patent document teaches carrying out multiple surface hardening and aging operations after thermomechanical treatment to improve elastic and fatigue properties. The process comprises the steps of thermomechanical treatment, artificial low-temperature aging, finish grinding, surface hardening (roller peening or shot peening), artificial strain aging and multiple repetition of the surface hardening and aging operations. The Soviet patent document does not disclose subjecting the material to an externally applied pressure to exceed the creep resistance of the material during the artificial aging steps.

We perceive nothing in the combined teachings of the AAPA and the Soviet document which would have suggested the steps of impact-body-forming a component into a double-curved shape and thereafter subjecting the component to externally applied

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pressure of a value to exceed the creep resistance of the material during a step of artificial aging, as required by claims 1 and 8. Accordingly, we shall not sustain the examiner's rejection of claims 1 and 8, or claims 2, 3, 6 and 7 which depend from claim 1 and claims 9, 10, 13 and 14 which depend from claim 8.

The above-noted deficiency in the combination of the AAPA and the Soviet patent document with respect to the subject matter recited in independent claims 1 and 8 finds no cure in the Burg patent applied to support the obviousness rejection of claims 4, 5, 11 and 12 which depend ultimately from these independent claims. Accordingly, we shall not sustain the examiner's rejection of claims 4, 5, 11 and 12 as being unpatentable over the AAPA in view of the Soviet patent document and Burg.

CONCLUSION

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To summarize, the decision of the examiner to reject
claims 1-14 under 35 U.S.C. § 103 is reversed.

REVERSED

IAN A. CALVERT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
NEAL E. ABRAMS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
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JENNIFER D. BAHR)	
Administrative Patent Judge)	

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